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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/533,203

03/23/2000

Christopher R. Fairley

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05/21/2004

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EXAMINER

LUU, THANH X

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/533,203

Applicant(s)

FAIRLEY ET AL.

Examiner

Thanh X Luu

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-50 is/are pending in the application.
- 4a) Of the above claim(s) 34-50 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15, 17-20, 22-26 and 28-33 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 7-11, 16 and 27 is/are rejected.
- 7) ☒ Claim(s) 2, 5 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

This Office Action is in response to remarks filed April 15, 2004. Claims 1-20 and 22-50 are currently pending.

Claims 34-50 have been withdrawn. Examiner recommends that Applicant cancel the withdrawn claims.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 16 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It appears that Applicant has failed to disclose an embodiment in which there is a multiple element offset fly lens arrangement that comprises a pinhole array. As understood, the fly lens array and the pinhole array are alternative embodiments.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (U.S. Patent 5,854,674).

Regarding claims 1, 8-10, Lin discloses (see Fig. 6) a system for inspecting a specimen, comprising: a light energy source (laser); a multiple element arrangement (100, 102) for receiving light energy from the light energy source; a lensing/imaging arrangement (66') for receiving light energy from the multiple element arrangement and imparting the light energy to the specimen (wafer); a pinhole mask (28') for receiving light energy reflected from the specimen through the lensing arrangement and selectively passing the reflected light energy; and a time delay and integration charge coupled device (TDI-CCD; 90', see col. 11, line 67- col. 12, lines 1-5) for receiving light energy from the pinhole mask. The lensing arrangement is capable of autofocus and the pinhole mask is adjacent to the TDI-CCD. Lin also discloses (see Fig. 6) a focusing lens (98') as claimed.

6. Claims 1 and 7-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Derndinger et al. (EP 871052, published October 14, 1998).

Regarding claims 1 and 7-10, Derndinger et al. disclose (see Fig. 1b) a system for inspecting a specimen, comprising: a light energy source (1); a multiple element arrangement (4a) for receiving light energy from the light energy source; a lensing/imaging arrangement (3', 5, 7) for receiving light energy from the multiple element arrangement and imparting the light energy to the specimen (8); a pinhole mask (4b) for receiving light energy reflected from the specimen through the lensing arrangement and selectively passing the reflected light energy; and a time delay and integration charge coupled device (11) for receiving light energy from the pinhole mask. The lensing arrangement is capable of autofocus and the pinhole mask is adjacent to the TDI-CCD. Derndinger et al. also disclose (see Fig. 1b) a focusing lens (10) as claimed. Derndinger et al. further disclose (see Fig. 1b) the lensing/imaging arrangement comprises: a first lens (5), a transmitter/reflector (3'), an objective and a tube lens (7).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Derndinger et al.

Regarding claim 3, Derndinger et al. disclose the claimed invention as set forth above. Derndinger et al. do not specifically disclose an arc lamp. However, it is well

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known in the art to use arc lamps in confocal microscopy. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an arc lamp as claimed in the apparatus of Derndinger et al. to provide sufficient illumination.

9. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derndinger et al. in view of Applicant's Admitted Prior Art (Fig. 1), hereinafter, AAPA.

Regarding claims 4 and 11, Derndinger et al. disclose the claimed invention as set forth above. Derndinger et al. do not specifically disclose a laser energy source as claimed. AAPA (see Fig. 1) teaches a laser energy source in a confocal arrangement as claimed. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a laser energy source as claimed in the apparatus of Derndinger et al. in view of AAPA to provide more accurate and precise detection.

Allowable Subject Matter

10. Claims 12-15, 17-20, 22-26 and 28-33 are allowed.

11. Claims 2, 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

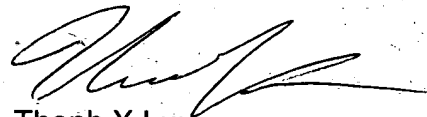
12. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X Luu whose telephone number is (571) 272-2441. The examiner can normally be reached on M-F (6:30-4:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu
Primary Examiner
Art Unit 2878

05/04